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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,175	11/06/2001	James R. Gannoe	HRT-0288	8976
27777	7590	02/02/2004	EXAMINER	
PHILIP S. JOHNSON JOHNSON & JOHNSON ONE JOHNSON & JOHNSON PLAZA NEW BRUNSWICK, NJ 08933-7003			PHILOGENE, PEDRO	
			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,175

Applicant(s)

GANNOE ET AL.

Examiner

Pedro Philogene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-32 and 49-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-23 and 49 is/are allowed.
- 6) ☒ Claim(s) 24-32 and 50-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Milo (3,858,578).

With respect to claims 29-31 Milo discloses a device (A) for holding medical instrument comprising a flexible arm (B) having a plurality of links (22), each having a hole therethrough, an elongate, flexible element (D) extending through the holes of the plurality of links; a tensioning device (E) movable between a first position and a second position, the first position locking the plurality of links in a fixed position, the second position permitting the plurality of links to move relative to one another, as set forth in column 1, lines 55-62; and as set forth in column 3, lines 24-32; an actuator (44) couple to the tensioning device for moving the tensioning device between the first and second positions; the actuator being biased toward the first position so that the flexible arm is in the fixed position , wherein actuation of the actuator moves the tensioning device to the second position so that the flexible arm is free to move; as set forth in column 3, lines 25-67, column 4, lines 1-5.

With respect to claims 30,31, Milo discloses all the limitations, as best seen in FIGS. 1,2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24,25,27,28,50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milo (3,858,578) in view of Hu et al. (6,331,158).

With respect to claims 24,25,27,28, 50-52, it is noted that Milo did not teach of a base link that is aligned with one of the plurality of links on the distal end along a second axis, wherein the second axis forms an angle with the first axis of between 45 and 90 degrees; as claimed by applicant. However, in a similar art, Hu et al evidence the use of a device having a body having a base link that is aligned with a distal end of a rigid shaft along a second axis forming an angle to reduce the tendency of the shaft means to rotate about its axis when torque is applied.

Therefore, given the teaching of Hu et al. it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the base link of Milo with the base link, as taught by Hu et al to reduce the tendency of the flexible arm or plurality of links to rotate about its axis when torque is applied.

As to the angle between 45 to 90 degrees from the first axis to the second axis or an offset position from 0.30 to 0.50 of the base element to the axis; as claimed by applicant. It would have been obvious to one having ordinary skill in the art at the time the invention was made to reach the optimum range or value, since it has been held

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that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. In re Aller, 105 USPQ 233; or an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Milo (3,858,578) in view of Frascioni (5,976,080).

With respect to claim 32, it is noted that Milo did not teach of a spring biasing the actuator toward the first position; as claimed by applicant. However, in a similar art, Frascioni evidences the use of a spring bias actuator to permit relative articulation of the link members.

Therefore, given the teaching of Frascioni, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the fluid actuator of Milo with the spring bias actuator of Frascioni to permit relative articulation of the link members.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Milo (3,858,578) in view of Hu et al (6,331,158) in view of Frascioni (5,976,080).

With respect to claim 36, it is noted that the above combination did not teach of a spring biasing the actuator toward the first position; as claimed by applicant. However, in a similar art, Frascioni evidences the use of a spring bias actuator to permit relative articulation of the link members.

Therefore, given the teaching of Frascioni, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the fluid

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actuator of Milo/Hu et al. with the spring bias actuator of Frascioni to permit relative articulation of the link members.

Allowable Subject Matter

Claims 20-23,49 are allowed.

Response to Amendment

Applicant's arguments with respect to claims 20-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

A shortened statutory period for reply to this action is set to expire THREE MONTHS from the mailing date of this action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro Philogene whose telephone number is (703) 308-2252. The examiner can normally be reached on Monday to Friday 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P Shaver can be reached on (703) 308-2582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pedro Philogene
January 29, 2004


PEDRO PHILOGENE
PRIMARY EXAMINER